

1 50940/CM/A51

WHAT IS CLAIMED IS:

5 1. A method for forming a double containment pipeline section comprising:

adhering granular material on a first face of a tape;
wrapping the tape around a primary pipeline section; and
forming a secondary pipeline section around the wrapped
10 primary pipeline section, wherein the granular material defines
an annulus between the primary and secondary pipeline sections.

2. A method as recited in claim 1 wherein forming
comprises defining an annulus between the primary and secondary
15 pipeline sections having a radial thickness no greater than about
1 mm.

3. A method as recited in claim 1 wherein wrapping
comprises wrapping the tape around the primary pipeline section
20 sandwiching the granular material between the tape and the
primary pipeline section.

4. A method as recited in claim 1 wherein wrapping
comprises:
25 wrapping the tape around the primary pipeline section with
the granular material on the outside of the tape; and
wrapping a second sealing tape over the granular material
sandwiching the granular material between the two tapes.

5. A method as recited in claim 1 wherein forming
comprises:
30 wrapping a resin embedded material over the wrapped tape;
and
curing the resin embedded material forming a secondary
35 pipeline section.

6. A method as recited in claim 1 further comprising:
forming a primary pipeline section from resin embedded
5 material; and
partially curing the primary pipeline section prior to
wrapping the tape having the adhered granular material.

7. A method as recited in claim 1 further comprising:
10 forming a primary pipeline section from resin embedded
material;
sealing off the resin embedded material prior to wrapping
the tape having the adhered granular material; and
curing the formed primary and secondary pipeline sections.

15 8. A method as recited in claim 7 wherein sealing off the
resin embedded material comprises wrapping the formed primary
pipeline section with a plastic tape.

20 9. A method as recited in claim 1 wherein adhering
granular material to the tape comprises pulling a tape having a
tacky adhesive on a first face through a container of granular
material adhering a layer of granular material on the first face.

25 10. A method as recited in claim 1 wherein adhering
granular material to the tape comprises sprinkling granular
material on a face of the tape having a tacky adhesive.

30 11. A method as recited in claim 1 wherein adhering
comprises adhering sand on a first face of a tape.

12. A method as recited in claim 1 wherein wrapping a tape
around a primary pipeline section comprises wrapping a tape
around a pipe fitting.

1 50940/CM/A51

13. A method as recited in claim 1 further comprising
helically winding a pair of spaced apart wires around the primary
5 pipeline section so as to be in contact with the granular
material.

14. A method as recited in claim 1 wherein the granular
material comprises particles and wherein a majority of said
10 particles are in contact with the primary pipeline section.

15. A method for forming a double containment pipeline
section comprising:
wrapping a tape having a tacky adhesive on one face around
15 a primary pipeline section with the face having the tacky
adhesive on the outside;
applying a granular material on the taped pipeline section,
adhering a layer of granular material on the tacky adhesive; and
forming a secondary pipeline section over the granular
20 material layer wherein the granular material layer defines an
annulus between the primary and secondary pipeline section.

16. A method as recited in claim 15 wherein the granular
material comprises particles wherein a majority of said particles
25 are in contact with the secondary pipeline section.

17. A method as recited in claim 15 section wherein forming
comprises defining an annulus between the primary and secondary
pipeline sections having a radial thickness no greater than about
30 1 mm.

18. A method for forming a double containment pipeline
section comprising:
applying a layer of adhesive over primary pipeline
35 section;

applying a granular material on the adhesive forming
a permeable layer adhered around the primary pipeline section;
5 and

forming a secondary pipeline section over the granular
material covered primary pipeline section wherein the granular
material defines an annulus between the primary and the secondary
pipes.

10

19. A method as recited in claim 18 section wherein forming
comprises defining an annulus between the primary and secondary
pipeline sections having a radial thickness no greater than about
1 mm.

15

20. A method as recited in claim 18 further comprising
wrapping a sealing layer over the granular material covered
primary pipeline section.

20

21. A method as recited in claim 18 wherein applying a
granular material comprises applying sand.

22. A method as recited in claim 18 wherein the granular
material comprises particles, and wherein a majority of said
25 particles adhered around the primary pipeline section are in
contact with the secondary pipeline section.

23. A method for forming a double containment pipeline
section comprising:

30

forming a primary pipeline section having a granular
material adhered over an outer surface of the primary pipeline
section; and

forming a secondary pipeline section over the granular
material wherein the granular material defines an annulus between
35 the primary and the secondary pipes.

1 50940/CM/A51

24. A method as recited in claim 23 wherein forming a primary pipeline section comprises:

5 forming a primary pipeline section having tacky adhesive on its outer surface; and

applying a granular material on the adhesive forming a permeable layer around the primary pipeline section.

10 25. A method as recited in claim 23 wherein the granular material defines the annulus between the primary and secondary pipeline sections having a radial thickness no greater than about 1 mm.

15 26. A method as recited in claim 23 wherein the granular material comprises particles wherein a majority of said particles are in contact with the secondary pipeline section.

27. A method as recited in claim 23 wherein applying a granular material comprises applying sand.

28. A method for forming a double containment pipeline section comprising:

forming a primary pipeline section;
25 forming a secondary pipeline section surrounding the primary pipeline section; and

applying a layer of granular material between the primary and secondary pipeline sections wherein the granular material comprises particles and wherein a majority of the
30 particles are in contact with at least one of said primary and secondary pipeline sections.

35

1 50940/CM/A51

29. A method as recited in claim 28 wherein a majority of
the particles are in contact with primary pipeline section and
5 wherein a majority of the particles are in contact with the
secondary pipeline section.

30. A method as recited in claim 28 wherein the granular
material defines an annulus having a radial thickness no greater
10 than about 1 mm.

15

20

25

30

35